MacDonald Designs: The Robert Addison Library Project Charter

COMP 1288: IT Project Management

A project management plan for the RAL Web online catalogue.

Neil MacDonald
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Contents

Introduction

Project Title: RAL Web

Project Manager: Neil MacDonald
Project Champion: Donald Combe

Project Duration:

Start Date: March 1st, 2016
End Date: April 15th, 2016
No. of days   35.5

Project Background

The Robert Addison Library (RAL) is one of the oldest existing private libraries in Canada. It was the private property of Robert Addison, an Anglican minister, who emigrated to Upper Canada (now known as Ontario) in 1792 to found St. Mark's Anglican Church in Niagara-on-the-Lake. The majority of the library was purchased in England before his departure and consists of many theological, literary, and poetic titles, which are of interest to antiquarian librarians and researchers.

In 1967 a rudimentary catalogue of the library contents was created; however, this catalogue only exists in print and is incomplete. During an audit of the library (2006-2008), it was discovered that many titles were not included in the original catalogue. These titles have since been recorded and the supervising Archives Committee responsible for the RAL would like to create an online catalogue and web portal to raise awareness of the library and make it accessible to researchers.

The RAL, known among librarians and archivists, occasionally receives inquiries by phone and e-mail regarding specific titles in the collection. This process is time consuming for the members of the RAL and perhaps not entirely satisfactory for the researchers. The Archives Committee would like to automate this process by creating an online catalogue. The existence of an online catalogue would allow researchers to find the information they are seeking and spread awareness of the library's existence.

In order to achieve this goal, the RAL wishes to create a web-accessible database/catalogue using MySQL and a separate WordPress site to act as a portal for the library and catalogue. Both of these can be hosted by the same company.

Stakeholders

Internal

Stakeholder	Project Position	Company Position	Contact Details
MacDonald, Neil	Project manager	MacDonald Designs - owner/manager	n.macdonald@macdesign.com
Tsuda, Mika	Database designer	MacDonald Designs - employee	m.tsuda@macdesign.com
Wong, Evelyn	Web technologist	MacDonald Designs - employee	e.wong@macdesign.com

Table 1 internal stakeholdders

External

Stakeholder	Project Position	Company Position	Contact Details
Babcock, Peter	Archivist	Archives Committee member	p.babcock@ral.org
Combe, Donald	Project Champion & Chief archivist	Archives Committee member	d.combe@ral.org
Users	Academic and antiquarian book researchers	None	None
Host Papa	Internet hosting company ISP	None	http://www.hostpapa.ca/

Table 2 external stakeholders

Scope Definition

This project includes the photographing of each book's title page, archival work, UX design, database & site construction, implementation, and quality testing. When complete, the RAL will have a web portal detailing information about the library, a browsable image gallery, and a fully searchable online catalogue.

In-Scope

- Complete project charter (this document)
    - Submit project charter to the Archives Committee for approval
- Create project wiki as a stakeholder communication tool
    - Manage project wiki for duration of the project
- Conduct user needs assessments for the catalogue/database
    - Write business rules for the database
- Design ERD for the database
- Conduct user needs assessments for the web portal
- Conduct UX design for the database (multiple prototypes)
- Conduct UX design for web portal (multiple prototypes)
- Submit UX designs and prototypes for approval of the Archives Committee
- Create MySQL database on MacDonald Designs server
- Create WordPress installation on MacDonald Designs server
- Build MySQL database
    - Import CSV data from Excel
    - Import digital images
- Build web interface for the database
- Write PHP scripts to connect the database to the webpage
- Build the web portal in WordPress
- Get initial content for web portal from the Archives committee
- Perform quality assurance testing
- Register and purchase domain name
- Purchase online hosting for a MySQL database (the catalogue) and one WordPress installation (web portal)
- Upload all work to the online host
- Perform final quality assurance testing
- Seek final approval of the catalogue and web portal from the Archives Committee
- Train the Archives Committee in the use of the catalogue and web portal
- Submit project documentation to the Archives Committee
- Conduct post-project analysis

Out-of-Scope

- Photograph the title page of each title in the library (over 1200 titles)
  - Develop naming convention for digital images
  - Edit and resize images
- Determine if multiple titles are bound within a single book
- Record any notes of provenance where appropriate
- Data entry of paper catalogue into Excel spreadsheet
- Purchase and setup a computer terminal for use in the RAL

Deliverables

The following table details the deliverables, how, and when they will be delivered throughout the project. All deliverables will be delivered to Donald Combe of the Archives Committee (project champion).

Deliverable	Delivery Method	Due Date
Project charter	PDF document • E-mailed to D.Combe • Posted to project wiki	March 4th, 2016
Web portal UX design • **Includes low-fidelity prototype**	PDF document • E-mailed to D.Combe • Posted to project wiki	March 22nd, 2016
Web interface for catalogue UX design	PDF document • E-mailed to D.Combe • Posted to project wiki	March 29th, 2016
Database UX design • **Includes low-fidelity prototype**	PDF document • E-mailed to D.Combe • Posted to project wiki	March 29th, 2016
Database/catalogue	Installed on hosting server • Access restricted to internal stakeholders and Archives Committee members	April 11th, 2016
Web portal and catalogue web interface	Installed on hosting server • Access restricted to internal stakeholders and Archives Committee members	April 14th, 2016
Project documentation	PDF document • Hand-delivered • E-mailed to D.Combe • Posted to project wiki & web portal	April 15th, 2016
Training	Face-to-face	April 15th, 2016

Table 3 deliverables

Critical Assumptions

Hardware & Infrastructure
- MacDonald Design server remains operational and accessible to all internal stakeholders
    - Project wiki remains accessible to all internal stakeholders and Archives Committee members
- All internal stakeholders have access to high speed internet for the duration of the project

Internal Stakeholders
- All internal stakeholders have the required expertise to complete their assigned tasks in the time given
- All internal stakeholders will be on this project for the full duration

External Stakeholders
- The Archives Committee will be able to provide MacDonald design with the necessary digital files on-schedule
- The project champion (Donald Combe) will sign-off on the deliverables or request changes within three days of receiving them
    - Any delays caused by a failure of the project champion to reply within three days may result in an extension to the project deadline of an equal number of days

Charter Assumptions
- No changes will be made to the scope after it receives approval

Communication
- The project manager will report to the project champion on a weekly basis via e-mail
- All internal stakeholders will update their progress daily on the project wiki
- All communications via internal and external stakeholders will receive a response within 24 (excluding weekends)

Budget
- The budget is fixed and cannot be altered

Project Schedule

The following table details the dates for five phases of the RAL Web project.

Phase	Start Date	End Date	Duration
Phase One: Planning	March 1st, 2016	March 3rd, 2016	3 days
Phase Two: UX design	March 4th	March 28th, 2016	16 days
Phase Three: Development	March 28th, 2016	April 11th, 2016	10 days
Phase Four: Implementation	April 7th, 2016	April 15th, 2016	6.5 days
Phase Five: Post-project analysis	April 15th, 2016	April 20th, 2016	3 days
Total project length			**35.5 days**

Table 4 project schedule

See the attached MS Project WBS file for a complete analysis of the task schedule.

Roles and Responsibilities

The next three tables detail the internal and external stakeholders, their respective titles and responsibilities, and different tasks.

Internal Stakeholders

Stakeholder	Project Position	Responsibilities
MacDonald, Neil	Project Manager	- Project plan and manage project - Liaise with Project Champion - Submit all deliverables on schedule - Risk management - User needs assessments - Database business rules - Project security - Domain name and hosting - Upload database and web portal - Training - Post-project analysis
Tsuda, Mika	Database designer	- Design ERD - Build database - Import CSV data - QA testing - Project documentation
Wong, Evelyn	Web technologist	- Project wiki – build & maintain - Build web portal - Web interface for database - PHP code

Table 5 roles & responsibilities - internal stakeholders

External Stakeholders

Stakeholder	Project Position	Responsibilities
Combe, Donald	Project Champion & Archivist	• Liaise with Project Manager • Approval for… o project charter & scope definition o UX prototypes o Final project
Babcock, Peter	Archivist	• Content development
Host Papa	Web hosting	• Ensuring that the catalogue and web portal remain online and accessible • Maintain RAID backups

Table 6 roles & responsibilities - external stakeholders

Tasks

Task	Name	Responsibilities
UX design	• MacDonald, Neil • Wong, Evelyn	• UX design and prototype the catalogue and web portal • Documentation and final prototypes
Photography	• Combe, Donald • Babcock, Peter	• Photographing the title page and any illustrations or inscriptions of interest in the books
Data Entry	• Combe, Donald • Babcock, Peter	• Renaming the digital images according to the project naming convention • Entering catalogue data into an Excel spreadsheet
Archival & bibliographic work	• Combe, Donald • Babcock, Peter	• Determining which titles are bound together • Recording notes of providence

Table 7 roles & responsibilities - tasks

Budget

The following table shows the proposed budget for the RAL Web project. There is one variable expense in this project: a single return trip ticket from Vancouver, BC to Hamilton, ON. This ticket will be purchased closer to the expected travel date. Neil MacDonald will travel to the Robert Addison Library to deliver the final documentation, conduct training, and post-project stakeholder interviews with members of the library. During this trip, transportation and accommodation will be provided by a member of the library. $1000 has been budgeted for the airline ticket.

The RAL is a non-profit organization and is financing this project with funds from their endowment; therefore, the price is fixed. However, if a trade-off is required between time and money, the RAL is comfortable with necessary extensions to the length of the project.

Phase	Cost
Phase One: Planning	$4,680.00
Phase Two: UX design	$24,140.00
Phase Three: Development	$13,440.00
Phase Four: Implementation	$5,200.00
Phase Five: Post-project analysis	$2,640.00
Variable expense	$1000.00
Material expenses	$343.00
Total cost	**$51,443.00**

Table 8 budget (simplified))

For a more detailed breakdown of the budget, please see the Appendix and the attached WBS file.

Risk Management

Key: Probability vs. Impact

Probability	Impact		
	High	Medium	Low
High	1. Extreme	2. High	3. Medium
Medium	4. High	5. Medium	6. Low
Low	7. Medium	8. Low	9. Minimal

Table 9 risk management key

	Risk	Severity	Mitigation Strategy
Technology	MacDonald Design server could go down	8. Low	Backups of all project data are performed on a daily basis. Should the server go down, rent server space from Amazon.com and create a virtual server to host our data until our server can be restored.
	Project data could be lost or corrupted	6. Low	Backups of all project data are performed on a daily basis. At most, one day's worth of work will be lost.
	Stakeholders could experience internet connectivity problems	9. Minimal	All stakeholders have reliable internet access at project start. Switching to a new ISP will result in only a brief interruption
Project	Scope creep	2. High	A thorough user needs analysis should identify all scope items. If new scope items are requested after the 2nd set of deliverables have been accepted, new deadlines and budget can be negotiated.
	Completed project is rejected	7. Medium	Thorough scope definition and user needs assessments should prevent this. Project documentation will show that all requirements asked for and accepted were met.
HR	Internal stakeholders lack necessary expertise or leave before project completion	8. Low	Replacements will be identified for all internal stakeholder positions before the commencement of the project.

Table 10 risk management

Quality Management

Documentation

1. The same template will be used for all project documentation.
2. All documents and folders will follow established MacDonald Design naming conventions.
3. All project-related documents will be saved to the RAL Web project folder and appropriate sub-folder on the company server.
4. The following programs will be used for all project-related documentation:
   a. MS Word 2007 or later,
   b. MS Excel 2007 or later,
   c. MS PowerPoint 2007 or later,
   d. MS Project 2007 or later or GanttProject for OS X, and
   e. MS Visio 2007 or later or LucidChart for OS X.
5. All documents delivered to external stakeholders should be PDFs.
6. All deliverables will be proof-read by at least two internal stakeholders.

Communication

7. All internal stakeholders will record their daily progress, any difficulties, and anything noteworthy to the wiki.
8. The project Manager will read stakeholder posts on a daily basis and offer feedback or guidance when needed.
9. Internal and external stakeholders will meet/teleconference at the beginning of each phase.

Technology

10. Routine maintenance will be performed on all internal stakeholder computers and server(s) before the beginning of the project.
11. Daily backups of all project data will be performed throughout the project. Version control software will keep all file versions until the completion of the project.
12. All coding (SQL, HTML, CSS, PHP) will be formatted and annotated according to MacDonald Designs conventions.
13. All deliverables will be tested by at least two internal stakeholders.

Scope

14. Deliverables will be checked against the scope to check for compliance.
15. Requests for scope changes will be evaluated by the Project Manager and discussed with the Project Champion before being approved. Changes to the deadline or budget may be necessary.

Communication Plan

The Project Manager is responsible for supervising all communication on this project. The following table documents the expected communiqués with regard to the stakeholders involved, purpose, the format, and date during this project. The **bolded and underlined** stakeholder is directly responsible for the corresponding communiqué.

Stakeholders	Purpose	Format	Date
Project manager Project champion Database designer Web technologist	Project orientation	Teleconference[1]	March 1st, 2016
Project manager Project champion **Database designer** **Web technologist**	Daily status reports	Wiki	Daily
Project manager Project champion	Project charter	PDF – email & teleconference	March 4th, 2016
Project manager Database designer Web technologist	Status report	In-person meeting	Every Friday afternoon, March 4th – June 3rd, 2016
Project manager Project champion	Progress report	Teleconference	Every Monday morning, March 7th – April 11th, 2016
Project manager Project champion **Database designer**	Database UX design	PDF – email & Teleconference	March 29th, 2016
Project manager Project champion **Web technologist**	Web portal UX design	PDF – email & Teleconference	March 30th, 2016
Project manager Project champion	Project documentation	PDF – email & Face-to-face	April 15th, 2016
Project manager Project champion	Post-project analysis interview	Face-to-face	April 15th, 2016

Table 11 communication plan

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[1] All teleconferences use Skype.

Methodology

MacDonald Design uses a mixed approach to project development. We use both a traditional systems development life cycle (SDLC or waterfall) approach for the overall project and agile methods for design and development (phases two and three).

Phase One: Planning
- Analysis of the data to be entered into the catalogue and web portal
- Initial user needs assessment and analysis
  - Questionnaire and interviews
- Determine best technical solution for RAL's needs
- Prepare necessary project hardware and software
- Scope definition

Phase Two: UX design
- Conduct further user needs assessments
  - interviews
- Prototype
  - Test
  - Refine
- Two to three iterations

Phase Three: Development
- Execute designs from phase two
- Quality assurance testing

Phase Four: Implementation
- Catalogue/database and web portal are transferred to hosting server
- Additional testing and security checks
- Training
- Delivery of documentation

Phase Five: Post-project analysis
- Sign off
- Post-project stakeholder interviews
- Analysis and assessment
- Lessons learned and revision of business processes and practices

Appendix

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Cost
0		RAL Web	35.5 days	2016-03-01	2016-04-20			$50,100.00
1		Phase One: Planning	3 days	2016-03-01	2016-03-03			$4,680.00
2		initial data requirements a	1 day	2016-03-01	2016-03-01		Neil MacDonald	$880.00
3		project wiki	3 days	2016-03-01	2016-03-03	2SS	Evelyn Wong	$2,040.00
4		project charter	2 days	2016-03-02	2016-03-03	2	Neil MacDonald	$1,760.00
5		Project charter sign off	0 days	2016-03-03	2016-03-03	4	Neil MacDonald	$0.00
6		Phase Two: UX design	16 days	2016-03-04	2016-03-28			$24,140.00
7		catalogue/database	16 days	2016-03-04	2016-03-28			$14,280.00
8		stakeholder interviews	3 days	2016-03-04	2016-03-08	5	Neil MacDonald	$2,640.00
9		taxonomy	1 day	2016-03-09	2016-03-09	8	Mika Tsuda	$760.00
10		design ERD	12 hrs	2016-03-10	2016-03-11	9	Mika Tsuda	$1,140.00
11		prototype 1	3 days	2016-03-11	2016-03-16	10	Mika Tsuda	$2,280.00
12		testing	2 days	2016-03-16	2016-03-18	11	Mika Tsuda	$1,520.00
13		prototype 2	20 hrs	2016-03-18	2016-03-22	12	Mika Tsuda	$1,900.00
14		testing	2 days	2016-03-23	2016-03-24	13	Neil MacDonald,M	$3,280.00
15		UX documentation	1 day	2016-03-28	2016-03-28	14	Mika Tsuda	$760.00
16		UX database design cor	0 days	2016-03-28	2016-03-28	15		$0.00
17		user needs assessments - web portal	12 days	2016-03-04	2016-03-21			$8,160.00
18		user needs interviews	3 days	2016-03-04	2016-03-08	5	Evelyn Wong	$2,040.00
19		site map	4 hrs	2016-03-09	2016-03-09	18	Evelyn Wong	$340.00

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Cost
20		taxonomy	4 hrs	2016-03-09	2016-03-09	19	Evelyn Wong	$340.00
21		prototype 1	3 days	2016-03-10	2016-03-14	20	Evelyn Wong	$2,040.00
22		testing	1 day	2016-03-15	2016-03-15	21	Evelyn Wong	$680.00
23		prototype 2	2 days	2016-03-16	2016-03-17	22	Evelyn Wong	$1,360.00
24		testing	1 day	2016-03-18	2016-03-18	23	Evelyn Wong	$680.00
25		UX documentation	1 day	2016-03-21	2016-03-21	24	Evelyn Wong	$680.00
26		UX web portal design c	0 days	2016-03-21	2016-03-21	25		$0.00
27		**catalogue web interface**	**3.5 days**	**2016-03-22**	**2016-03-28**			**$1,700.00**
28		user needs assessment	1 day	2016-03-22	2016-03-22	26	Evelyn Wong	$0.00
29		prototype 1	1 day	2016-03-23	2016-03-23	28	Evelyn Wong	$680.00
30		prototype 2	1 day	2016-03-24	2016-03-24	29	Evelyn Wong	$680.00
31		testing	4 hrs	2016-03-28	2016-03-28	30	Evelyn Wong	$340.00
32		UX catalogue web inter	0 days	2016-03-28	2016-03-28	31		$0.00
33		**Phase Three: Development**	**10 days**	**2016-03-28**	**2016-04-11**			**$13,440.00**
34		**catalogue/database development**	**7 days**	**2016-03-29**	**2016-04-06**			**$5,760.00**
35		install MySQL database	4 hrs	2016-03-29	2016-03-29	16	Mika Tsuda	$380.00
36		security	4 hrs	2016-03-29	2016-03-29	35	Mika Tsuda	$380.00
37		coding	5 days	2016-03-30	2016-04-05	36	Mika Tsuda	$3,800.00
38		import data	4 hrs	2016-04-06	2016-04-06	37	Mika Tsuda	$380.00
39		testing	4 hrs	2016-04-06	2016-04-06	38	Mika Tsuda,Neil N	$820.00
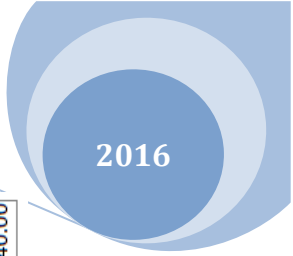
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Cost
40		database complete	0 days	2016-04-06	2016-04-06	39		$0.00
41		**web portal development**	**5.5 days**	**2016-03-28**	**2016-04-04**			**$4,180.00**
42		WordPress installation	2 hrs	2016-03-28	2016-03-28	32	Evelyn Wong	$170.00
43		security	6 hrs	2016-03-28	2016-03-29	42	Evelyn Wong	$510.00
44		coding	3 days	2016-03-29	2016-04-01	43	Evelyn Wong	$2,040.00
45		import content	1 day	2016-04-01	2016-04-04	44	Evelyn Wong	$680.00
46		testing	4 hrs	2016-04-04	2016-04-04	45	Evelyn Wong,Neil	$780.00
47		web portal complete	0 days	2016-04-04	2016-04-04	46		$0.00
48		**catalogue web interface**	**4.5 days**	**2016-04-05**	**2016-04-11**			**$3,500.00**
49		html + css coding	1 day	2016-04-05	2016-04-05	47	Evelyn Wong	$680.00
50		PHP coding	3 days	2016-04-06	2016-04-08	49	Evelyn Wong	$2,040.00
51		testing	4 hrs	2016-04-11	2016-04-11	50	Evelyn Wong,Neil	$780.00
52		catalogue web interface	0 days	2016-04-11	2016-04-11	51		$0.00
53		**Phase Four: Implementation**	**6.5 days**	**2016-04-07**	**2016-04-15**			**$5,200.00**
54		**catalogue/database**	**3 days**	**2016-04-07**	**2016-04-11**			**$2,280.00**
55		transfer catalogue to h...	4 hrs	2016-04-07	2016-04-07	40	Mika Tsuda	$380.00
56		testing	4 hrs	2016-04-07	2016-04-07	55	Mika Tsuda	$380.00
57		documentation	2 days	2016-04-08	2016-04-11	56	Mika Tsuda	$1,520.00
58		catalogue complete	0 days	2016-04-11	2016-04-11	57		$0.00
59		**web portal + catalgue we**	**3 days**	**2016-04-11**	**2016-04-14**			**$2,040.00**
60		transfer to server	4 hrs	2016-04-11	2016-04-11	52	Evelyn Wong	$340.00

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Resource Names	Cost
61		testing	4 hrs	2016-04-12	2016-04-12	60	Evelyn Wong	$340.00
62		documentation	2 days	2016-04-12	2016-04-14	61	Evelyn Wong	$1,360.00
63		web portal + catalogue	0 days	2016-04-14	2016-04-14	62		$0.00
64		training	1 day	2016-04-14	2016-04-15	63	Neil MacDonald	$880.00
65		**Phase Five: Post-project ana**	**3 days**	**2016-04-15**	**2016-04-20**			**$2,640.00**
66		stakeholder interviews	1 day	2016-04-15	2016-04-18	64	Neil MacDonald	$880.00
67		analysis	1 day	2016-04-18	2016-04-19	66	Neil MacDonald	$880.00
68		revision of business proce	1 day	2016-04-19	2016-04-20	67	Neil MacDonald	$880.00